

# NAVAL POSTGRADUATE SCHOOL

## Monterey, California



## THESIS

**STIMULATING INNOVATION IN NAVAL SPECIAL WARFARE  
BY UTILIZING SMALL WORKING GROUPS**

by

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March 2001

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STIMULATING INNOVATION IN NAVAL SPECIAL WARFARE  
BY UTILIZING SMALL WORKING GROUPS

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Submitted in partial fulfillment of the  
requirements for the degree of

MASTER OF SCIENCE IN DEFENSE ANALYSIS

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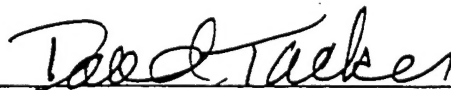
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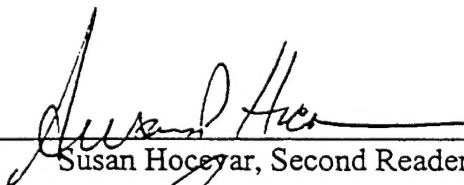


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## **ABSTRACT**

Naval Special Warfare has produced successful innovation by using small working groups. Naval Special Warfare deems an innovation successful if it results in a more efficient, less risky, more cost effective method to conduct special operations. The Quantum Leap program is an example of successful innovation in Naval Special Warfare produced by a small working group. How have these small groups been able to produce successful innovations? Michael McCaskey's Theory offers an explanation of how small working groups innovate. His theory is a generally accepted theory on how to produce innovation in the business world by using small working groups. McCaskey identified three variables needed to produce innovation: 1) the small working group must have the support and protection of the leadership, 2) have access to resources, and 3) have autonomy from established structure within an organization. After interviews with senior Naval Special Warfare officers, two additional variables were deemed important. Ownership and the license to fail were added to McCaskey's three variables.

This thesis will test which variables were or were not present during three Naval Special Warfare case studies where small working groups attempted to produce innovation. Two of the case studies successfully produced innovation, but the final case study failed to produce an innovation. This thesis will evaluate the five variables in each case study and attempt to explain why the innovation was a success or a failure.

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## I. INTRODUCTION

A rapidly changing world deals ruthlessly with organizations that do not change-and USSOCOM is no exception. Guided by a comprehensive, enduring vision and supporting goals, we must constantly reshape ourselves to remain relevant and useful members of the joint team. USSOCOM must embrace and institutionalize the process of change (General Peter J. Schoomaker, *Special Operations Forces: The Way Ahead*, p. 6).

### A. BACKGROUND

Naval Special Warfare Command (NSWC) is a component command of the United States Special Operations Command (SOCOM). NSWC is a bureaucracy within the larger United States military bureaucracy. Stephen Peter Rosen, summarizing a commonly held view writes, "Almost everything we know in theory about large bureaucracies suggests not only that they are hard to change, but that they are designed not to change. Military bureaucracies, moreover, are especially resistant to change." (Rosen, 1991, p. 2) SOCOM has given its component commanders clear direction to innovate to remain relevant in the 21<sup>st</sup> Century. Given that NSWC is a military bureaucracy, innovation is a very difficult task and extremely challenging to implement. James Q. Wilson, author of *Bureaucracy*, states,

"We ought not be surprised that organizations resist innovation. They are supposed to resist it. The reason an organization is created is in large part to

replace the uncertain expectations and haphazard activities of voluntary endeavors with the stability and routine of organized relationships. The standard operating procedure (SOP) is not the enemy of organizations, it is the essence of organization. Stability and routine are especially important in government agencies where demands for equity are easily enforced." (Wilson, 1989, p. 221)

Given the constraints of inflexibility and resistance to innovation, how do organizations within military bureaucracies innovate, remain relevant and successfully complete future missions?

Naval Special Warfare (NSW) believes that small working groups are an effective tool to overcome bureaucracies' resistance to innovation. The senior SEAL officers, interviewed by the author, were members of small working groups attempting to stimulate innovation. They believe small working groups break down barriers and roadblocks to innovation created by military bureaucracies. NSW has successfully utilized small working groups to stimulate innovation. This thesis will ask the following questions: What makes small working groups effective at stimulating innovation? Why do they work?

## B. DEFINING INNOVATION AND SMALL WORKING GROUPS

Innovation within the military can take many forms - doctrinal, strategic, tactical, technological, and material. The definition of innovation for the purposes of this thesis is the introduction of something new or different that improves the operational capabilities of SEAL platoons or Special Boat detachments to conduct successful Naval Special Warfare missions.

Small working groups, as defined by this thesis, are a small group of people (normally less than ten) who come together to stimulate innovation within a larger, bureaucratic organization. The small working group may be a permanent group or it may disband after meeting its objectives.

Why would a military bureaucracy need to utilize small working groups to stimulate innovation? Lipman-Blumen and Leavitt, co-authors of *Hot Groups*, believe that successful, long-lived organizations are fast becoming very rare. They state, "To cope with environmental turbulence, organizations are trying to become much more nimble, innovative and continuously self-modifying. They are also much more willing to combine, subdivide, form alliances, absorb pieces of one another and spin off pieces of



themselves. [Small working groups,] temporary and deft, are a perfect fit for such volatile conditions." (Lipman-Blumen and Leavitt, 1999, p. 74) In today's fast-paced environments, small working groups help organizations cut through red tape and excessive barriers to produce innovation.

### **C. DEFINING SUCCESS AND FAILURE AT INNOVATION**

Previously in this chapter, innovation was defined as the introduction of something new or different that improves the operational capabilities of SEAL platoons and Special Boat detachments to conduct successful Naval Special Warfare missions. This definition will be utilized throughout this thesis as the basic definition of a successful innovation. A successful innovation must improve operational capabilities, and be recognized, accepted, implemented, and utilized by the Naval Special Warfare Community. Identifying an innovation that improves operational capabilities is only the first step toward a successful innovation. The most difficult step is getting the innovation recognized, accepted, implemented and utilized within the NSW Community. "In the organizational world... the right answer is not likely to be the whole answer. The rest has to do with getting other parts of the

organization and the world to believe, accept and use your group's earth-shaking breakthrough. Failing that, your great output could - as so many have - quickly sink into the sea of the forgotten and forgone." (Lipman-Blumen and Leavitt, 1999, pp. 105-106) Lipman-Blumen and Leavitt have identified the importance of properly implementing an innovation.

An innovation that fails can be defined as a good idea that would have improved the operational capabilities of Naval Special Warfare, but it was not implemented. An example of this emerged during one of the case studies presented in this thesis (Vision 2000), where NSW senior leadership supported the innovation, received good reviews, but was not implemented. This failure may happen at any step of the process of innovation such as during the concept phase, development, testing and evaluation phase or during the implementation phase. A great innovative idea that would improve operational capabilities can easily fail during the implementation phase. The NSW Community may not recognize the innovation; the innovation may be recognized, but not be utilized by the NSW Community because, for example, it is too costly to implement. If the NSW does not recognize the importance of the innovation, then it is doomed to fail.

#### D. SCOPE

This thesis will examine three cases where NSW utilized small working groups to produce innovation. The NSW community has approximately 2,500 military personnel. It is a relatively small organization when compared to other communities within the military or large corporations, but it is a military bureaucracy. This thesis will provide specific details on how a bureaucratic organization can utilize small working groups to produce innovations. I have identified five variables that will be tested in this thesis to identify their relevance to producing innovation by small working groups. Three variables, support and guidance of the leadership, resources and funding, and autonomy, have been taken from *Framework for Analyzing Work Groups*, by Michael B. McCaskey (1979). The McCaskey article provides relevant definitions and examples of three common variables that will be tested and examined during this thesis. It provides a study on how small working groups produce innovation within a larger bureaucracy. This case study is used in the business world, but is relevant for Naval Special Warfare because the case study suggests how bureaucracies can utilize small working groups to stimulate innovation.

Stephen P. Rosen and James Q. Wilson support the McCaskey variables. For example, Rosen writes, "The study of peacetime military innovation showed that when military leaders could attract young officers with great potential for promotion to a new way of war, and then were able to protect and promote them, they were able to produce new, usable military capabilities." (Rosen, 1991, p. 252) Rosen emphasizes the importance of senior leadership's guidance and support when attempting to produce innovation. James Q. Wilson writes, "Innovation...requires an exercise of judgment, personal skill..." (Wilson, 1989, p.232) Wilson also believes that leaders must possess the adequate skills and vision to stimulate innovation.

I conducted interviews with senior SEAL officers who also support McCaskey's variables. Two additional variables, ownership and license to fail, were suggested by these senior NSW officers, who had experience with small, innovative working groups in NSW, as being important for producing innovation. The five variables will be explained in detail in Chapter two.

The thesis will examine three cases of innovation using small working groups; two cases produced innovation and one case failed to produce innovation. This thesis will look for the presence or absence of the five variables

in the case studies to determine which are relevant for innovation.

Chapter two will define the five variables and how they will be measured. Chapters three, four and five present the Naval Special Warfare case studies. Chapter six reports my findings and recommendations.

## II. FIVE KEY VARIABLES FOR SMALL WORKING GROUPS

### A. INTRODUCTION

Michael B. McCaskey (1979) wrote, "Framework for Analyzing Work Groups" as a case study to be used for classroom discussion at the Harvard Business School. The three variables from the McCaskey article are support and guidance of the leadership, resources and funding, and autonomy. His case study of the Merit Corporation has excellent examples of the positive effects when the variables are present within a parent organization as a small working group is attempting to stimulate innovation. The study also shows the negative effects on innovation when the variables disappear as the small working group is trying to stimulate innovation. These three variables were presented to several senior SEAL officers for validation and feedback. They all agreed that the McCaskey variables are relevant when attempting to stimulate innovation. A senior NSW officer who produced innovations with small working groups believes that two additional variables must be considered: ownership and the license to fail.

The Merit Corporation is a fictitious corporation based on an American corporation. "The Merit Corporation was a medium-sized firm that manufactured and sold

children's furniture nationally. From its inception the company had been family owned and operated, and John Kirschner was now the President of Merit." (McCaskey, 1979, p.2) Merit held a dominant market share in the children's furniture market, but the field was becoming increasingly competitive. Kirschner, who was approaching retirement age, was concerned with Merit's problem with developing new products. Kirschner decided to create a small working group to help develop new products and stimulate innovation within the Merit Corporation. The small working group consisted of seven members with one team leader.

Under Kirschner, the small working group enjoyed the support and guidance of the leadership, access to resources and funding, and autonomy. The group had three offices co-located on the fourth floor of an office building away from all the other Merit offices located on the second floor. Within six months the small working group had developed a variety of innovative and unique product ideas. After one year, the group developed a new product that within six months captured a 20% share of an extremely competitive market. The product was widely acclaimed for its low manufacturing cost, durability and consumer appeal.

After Kirschner retired, Joe Donaldson was brought in as the new Merit President. Donaldson immediately began to

question the small working group, as no new products were imminent. He moved the group down to the main offices and assigned the members of the group different offices not co-located with each other as they had been on the fourth floor. The group was encouraged to work routine hours and dress in traditional business attire. These changes began to create adverse tensions and the group lost its creative edge and ceased to produce new product innovations. The small working group was eventually disbanded and its personnel reassigned to different divisions. Some voluntarily left the company.

Under Kirschner, the small working group at Merit produced new product innovations and was ultimately a success; whereas, under Donaldson, the group was stifled, disbanded and ended in failure. McCaskey points out several variables that are necessary for innovation to occur and gives examples of positive outcomes when the variables are present within a large organization.

## **B. VARIABLES**

Five variables have been identified that should be present in order for small working groups to stimulate innovation within a larger, bureaucratic organization. Three variables are taken from McCaskey's article. These



variables are support and guidance from the leadership, resources and funding, and autonomy. The two additional variables, ownership and the license to fail were provided by a senior NSW officer who produced innovations with small working groups. All five variables will be tested in three Naval Special Warfare case studies to determine if they were present when innovation was successful or when it failed.

#### **1. Support and Guidance of the Leadership**

Support and guidance of the leadership can be defined as the senior leadership, often the actual commander of a particular unit, endorsing and supervising the small working group in its efforts to stimulate innovation and advocating its work. "Teams [small working groups] need the visible support of top management... So in the most successful organizations, [The leadership] meets regularly with the teams to see how they are coming, show their interest, and to learn from the teams." (Glenn, 1991, p. 20) The leadership needs to be actively involved and interested in the small working group's activities. They must ensure the group receives the appropriate level of priority within the larger organization so the group may

overcome barriers and roadblocks that may impede progress and innovation.

Admiral William Moffett, who was responsible for the development of carrier aviation as separate striking force acting independently from battleships prior to World War II, provides an example of the importance of leadership. "He did this... by intervening in the promotion process to ensure that a lot of aviators rose in rank." (Wilson, 1989, p. 226) Admiral Moffett kept the carrier aviation innovation alive by protecting aviators and getting them promoted which helped to ensure the innovation would be fully implemented. The aviation community had the support and guidance of the leadership.

The small working group in McCaskey's case study was given a high priority by the company president. "Kirschner personally recruited and selected the eight members of the group into the organization, thus making it clear to the rest of the organization that this is a special project, high on his list of priorities." (McCaskey, 1979, p. 5) The support and guidance provided by Kirschner is exactly what a small working group needs to flourish and become productive. He made it perfectly clear to the rest of the organization that the small working group would receive his support and guidance to help produce new product

innovations. Kirschner provided a high level of support and guidance to the small working group.

This study will look for indicators that support and guidance of the leadership was provided to the small, innovative working groups and will attempt to establish whether or not each group received the support and guidance of the leadership it required to accomplish its task. Several questions must be answered to determine if the small working group enjoyed the support and guidance of the leadership. Did the leadership select the personnel to make up the small working group? In McCaskey's case study, Kirschner, the company president, personally selected members for the small working group. What was the chain of command? Was the small working group under the direct supervision of the top leader, or did it report to a lower ranking leader? The small working group at the Merit Corporation reported directly to the company president and did not report to anyone else at the company. Did the group have a direct line of communication with the top leadership? In the Merit case, the group enjoyed a direct line of communication with the company president with no interference from the rest of the organization. Another important test of whether the group had the support and guidance of the leadership was whether the leadership

provides a vision with an end state along with clearly defined tasks and goals? In the Merit Corporation, Kirschner clearly explained that he wanted improved product development and that the small working group was created to stimulate new product innovations.

## **2. Resources and Funding**

The small working group needs the support and guidance of the leadership, but it also needs resources and funding. The resources and funding variable can be defined as the small working group having access to the resources (personnel and time) and funding necessary to accomplish its mission, task or goal. Admiral Moffett used his personnel and their time to acquire the funding to get contracts for high-speed carriers approved and kept the innovative carrier strike force alive and well. Without these resources, the carrier aviation innovation may have failed.

The small working group at Merit was given a budget sufficient to design and build prototypes of innovative children's furniture. Without the proper resources and funding made available from the larger organization, the group could not have properly functioned and would certainly not have accomplished its objectives. Stephen

Rosen does not believe that funding is important when trying to produce innovation. He believes that talented military personnel and time are important. He states that, "Rather than money, talented military personnel, time and information have been the key resources for innovation." (Rosen, 1991, p. 252) The senior NSW leadership disagrees with Rosen. They believe that funding is very important when attempting to stimulate innovation.

The resources and funding available to the small working group must be evaluated to determine if the group was provided sufficient resources to successfully complete its tasks. Several questions must be answered to determine if the small working group was provided the resources and funding by the larger organization. Was the small working group staffed with enough personnel? Did they possess the required skills to complete the necessary tasks? The small working group at Merit was adequately staffed with eight full time employees whose only job was to produce innovative new products. They were not assigned to any other divisions or given collateral duties. Was the small working group given the time required to complete its tasks? The group was given the proper amount of time to focus on new product development at Merit. The group produced its first innovative product months before

scheduled. Was the group given the amount of funding to successfully complete its tasks? Kirschner provided the group with a budget and used it for designing and building new innovative products.

### **3. Autonomy**

Autonomy can be defined as the small working group being an independent and self-directing group within the larger organization. In 1933, the newly created Fleet Marine Force (FMF) of the Marine Corps had organizational autonomy as its members were left alone to write training manuals, conduct exercises, design equipment and establish doctrine for amphibious warfare. The officers of the FMF were given autonomy by the leadership to develop innovative tactics on amphibious warfare. An autonomous group is one that is given very few organizational procedures to follow and very little formal structure that would constrain the group's behavior and innovative processes. As an example of this, McCaskey noted, "Because he wants to foster innovation, Kirschner has taken special pains to shield the [small working] group from most of the structure and procedures that apply to the rest of the organization." (McCaskey, 1979, p. 5) Kirschner only required a progress report every other week and a monthly financial report from

the group. This is a fine example of the corporate president giving the maximum autonomy to his small working group in order for the group to work towards its maximum potential.

Several questions must be answered to indicate whether the small working group was given the proper amount of autonomy to complete its tasks. Was the group subject to the same procedures that governed the rest of the organization? Who did the group work for and report to? How often did the group have to report its progress? What were the group members doing on a day-to-day basis and did it matter to the leadership of the organization? What normal rules and regulations was the group exempted from? What were some of the critical decisions of the leadership to show that the group had autonomy? In the Merit Corporation, the small working group was exempted from many of the procedures and guidelines that the rest of the organization had to follow. The group worked for the company president and only had to report to him every other week.

#### **4. Ownership**

The final two variables, ownership and the license to fail, were deemed important by senior NSW leadership.

There are three types of ownership. The leadership, small working groups and the NSW community can take ownership of an innovation. Although the leadership and the small working group at the Merit Corporation took ownership of the innovative project, the organization did not. The small working group took autonomy to an extreme of isolation, which contributed to the failure of ongoing innovation when a new leader (Donaldson) replaced Kirschner. In order to properly implement an innovation, the small working group must ensure that the leadership has ownership of the new innovation. The leadership can be said to take ownership of an innovation when it understands the innovation, recognizes its value, and assists its implementation. An indicator that the NSW leadership has taken ownership of an innovation is when the importance of the innovation is recognized and the leadership takes active steps to carry out the innovation. Another indicator of an organization taking ownership of an innovation is when great efforts are taken to write manuals, conduct exercises and establish doctrine to validate an innovation.

An example of this is the establishment of the Fleet Marine Force (FMF) in the Marine Corps in 1933. The



establishment of the FMF may have been the most important advance in the history of the Marine Corps.

"The practical result was for the first time, a permanent organization for the study and practice of amphibious warfare was created... [General John] Russell, [Commandant of the Marine Corps] directed that the Marine Corps Schools devote themselves exclusively to preparing a manual to train officers in the new methods of amphibious assault." (Rosen, 1991, p. 83)

The Marine Corps had taken ownership of the Fleet Marine Force innovation.

"[The small working group] must form the alliances, build the relationships and make the connections that will cause your groups output to be implemented." (Lipman-Blumen and Leavitt, 1999, pp. 105-106) Lipman-Blumen and Leavitt state that the organization must have 'buy-in' to the innovation produced by the small working group. The group must brief the rest of the organization and show how the innovation will enhance the organization's ability to function more efficiently. All of the key personnel briefed needed to have ownership of the project for it to be implemented and utilized.

In order for an innovation to be implemented, the organization must recognize the importance of the innovation and take ownership of it. Several questions must be answered to prove that the small working group was

successful at ensuring the whole organization would take ownership of their innovation. Once briefed, did the key leaders in the community understand the innovation, recognize its value, and help push it through the implementation process? Were training manuals written, exercises conducted and doctrine established to validate the innovation? The organization needs to recognize the importance of the innovation and take ownership of it.

#### **5. License to Fail**

A second issue that was mentioned by senior NSW leadership was the "license to fail". The small working group must be issued a "license to fail" by the larger organization.

"[The leadership] must convince their [subordinates] that if they join the innovative efforts of a (usually) short-term executive, their careers will not be blighted if the innovation fails or the executive departs before it is implemented. Admiral Moffett did this in the Navy; so did Commandant Russell in the Marine Corps..." (Wilson, 1989, p. 231)

License to fail exists when failing to meet an innovation goal does not have an adverse affect on the individual's military promotion. The leadership recognizes that in order to produce successful innovation, the group must be given a great amount of the latitude to stumble, fall down,

fail and pick itself back up and move forward again. The group's operations and path to stimulating innovation will not be flawless, but a series of mistakes, roadblocks, and possible failures. The license to fail gives the group permission to experiment and think far beyond organizational norms. Under this charter, the small working group will not be afraid to try radical ideas and innovations to solve its problems and meet its objectives.

Several questions must be answered to prove that the small working group was given the license to fail by the leadership. Was any member of the group in fear of being passed over for a military promotion if the group failed to produce an innovation? Due to a failure, was the group in jeopardy of being dissolved? Could the group fail without fear of retribution from the leadership or the rest of the organization? What was the leadership's response/actions when failure occurred?

### **C. METHODOLOGY**

I interviewed Captain William McRaven and Frank Clarke, who were members of the Quantum Leap small working group, at NSWG-1 in Coronado, CA. I interviewed CAPT McRaven for one hour and Frank Clarke for three hours. I conducted a one and a half hour telephone conversation with Dale Freeman, who was a member of the MKV SOC small working

group, at USSOCOM located in Tampa, FL. I interviewed CAPT Pete Toennies (ret), who was the group leader of the Vision 2000 small working group, for two hours in San Diego, CA.

Prior to the interviews, I created a standard list of questions to ask all of the members of the small working groups. The following is a list of the questions asked:

### **1. Support and Guidance of the Leadership**

1. Did the leadership select the personnel to make up the small working group?
2. What was the chain of command?
3. Was the small working group under the direct supervision of the top leader, or did they report to a lower ranking leader?
4. Did the group have a direct line of communication with the top leadership?
5. Did the leadership provide vision along with clearly defined tasks and goals?

### **2. Resources and Funding**

1. Was the small working group staffed with the number of personnel with the required skills to complete the assigned tasks?
2. Was the small working group given the time required to complete their tasks?
3. Was the group given the amount of funding to successfully complete their tasks?

### **3. Autonomy**

1. Was the group subject to the same procedures that governed the rest of the organization? Who does the

group work for and report to? How often did the group have to report its progress?

2. What are the group members doing on a day-to-day basis and does it matter to the leadership of the organization?
3. What normal rules and regulations was the group exempted from?
4. What were some of the critical decisions of the leader to show that the group had autonomy? Specific examples.

#### **4. Ownership**

1. Once briefed, did the key leaders in the community accept the innovation and help push it through the implementation process?

#### **5. License to Fail**

1. Was any member of the group in fear of losing their job if the group failed to produce an innovation?
2. Due to a failure, was the group in jeopardy of being dissolved?
3. Was the group given the latitude to fail without fear of retribution from the leadership or rest of the organization?
4. What was the leadership's response/actions when failure occurred?

The people interviewed were asked the same exact questions to keep the case studies standard and consistent. They also provided written materials to provide additional reference material. Their answers along with the written material were analyzed and the case studies were created.

The five variables (Support and guidance of the leadership, resources and funding, autonomy, ownership and license to fail) have been presented and defined. Chapters three, four and five are NSW case studies. Each case study is analyzed for evidence of the variables and to identify what their presence or absence suggests about small working groups stimulating innovation.

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### III. QUANTUM LEAP CASE STUDY

#### A. BACKGROUND

Naval Special Warfare Group ONE (NSWG-1) is located at NAB Coronado in San Diego, CA and is commanded by a SEAL Captain (O-6). NSWG-1 is the next higher authority for all West Coast SEAL Teams, SEAL Delivery Vehicle Team ONE in Hawaii and two overseas SEAL Units in Guam and Bahrain. The purpose of NSWG-1 is to, "Ensure NSWG-1 relevance in the 21<sup>st</sup> Century by maintaining a world class capability that is unorthodox in approach, dependable in execution and positively affects the Theater Commander's objective."

(McRaven, NSWG-1, p. 8) NSWG-1's vision is to provide the force of choice to clarify and simplify the battlefield, provide unorthodox solutions to complex military problems by leveraging advanced technology and to be recognized worldwide as dependable, highly disciplined and of uncompromising integrity.

In July 1996 a small working group with three key personnel was informally established to develop the Quantum Leap concept to use Indirect Warfare as an innovative approach to accomplishing NSW tasks. The key personnel were the group's leader, a SEAL Commander, then Chief Staff Officer, the second in command at NSWG-1. A Federal Civil



Servant at NSWG-1 was the technical expert and provided continuity for the project. A Navy Lieutenant, who worked very closely with the civil servant, was the third member of the group.

The Quantum Leap project began because new technology was forcing SEALs to change the way they conducted operations, threatening to make them irrelevant. The accuracy of precision-guided munitions made the standard SEAL platoon Direct Action mission appear too risky to the Theater Commander. Unmanned Ariel Vehicles (UAV) have the potential to both conduct reconnaissance missions against an enemy without risking human life and provide real-time intelligence to the military commander who needs it. UAVs can now conduct reconnaissance missions deep into enemy territory, where prior to UAV development, military personnel would have had to infiltrate enemy controlled territory to conduct risky reconnaissance missions. Night Vision Devices and thermal imagers are making it more difficult for personnel to infiltrate across the beach. It was obvious to the leadership at NSWG-1 that Naval Special Warfare operators needed to change the way they conducted operations in order to remain relevant in the 21<sup>st</sup> Century. Project Quantum Leap was the first step in ensuring that

Naval Special Warfare forces remain relevant and dependable in the future.

The major concept of the Quantum Leap project was the focus on Indirect Action. The difference between Direct Action and Indirect Action missions is that during a traditional SEAL Direct Action mission SEALs would use surprise and superior firepower to destroy a heavily defended target; whereas during an Indirect Action mission, SEALs accomplish the same task by destroying critical unprotected nodes. In doing so, the risk associated with the mission is reduced, but the effect on the enemy remains the same.

As an example, NSWG-1 has successfully completed 'mock' attacks against real critical nodes located in the San Diego area. The objective of the mission was to delay a naval vessel from getting underway for seventy-two hours. A traditional SEAL Direct Action mission would have been a combat swimmer attack against the naval vessel placing limpet mines on the hull of the ship. This type of attack is very risky to the SEAL operator because it places him in a very vulnerable position while he executes the mission. Instead of attacking a naval warship in San Diego Harbor, Quantum Leap operators destroyed a critical fuel pumping station that supplies all fuel to the San Diego area. By

destroying a secluded and unprotected pumping station, fuel was denied to NAS Miramar, San Diego Naval Station and the Point Loma Submarine Base, thus delaying the target vessel from getting underway for at least seventy-two hours. By completing this type of operation, the threat and risk to the operator was diminished while the effect on the enemy was the same.

Quantum Leap leveraged advanced technology to improve operational capabilities. During a fleet exercise conducted in 1997, Quantum Leap used secure real-time chat between five different Task Unit Commanders all located on different fleet ships and submarines taking part in the exercise. The NSW Task Group Commander, located on the command ship, was in constant communications with his Task Unit Commanders. The COTS communications led to improved information flow, operational updates and intelligence reporting. Improved technology allowed the development of tracking boxes that could be carried by individual SEALs and tracked by fleet systems. This would provide the operational commander instant verification of the location of the SEALs conducting the mission and provide situational awareness for the duration of the operation.

## **B. VARIABLES**

Having explained Quantum Leap, we can now determine how many of the variables we have identified were or were not present during the Quantum Leap Project.

### **1. Support and Guidance of the Leadership**

The Quantum Leap small working group enjoyed the support and guidance of the leadership at NSWG-1. The Commander, NSWG-1, personally selected the members of the original working group. The three key group members were augmented with permanent and temporary personnel, as the group's leader deemed necessary to complete its goals. These personnel were drawn from NSWG-1 and its tenant commands and possessed the required expertise and skills to complete the Quantum Leap objectives. As an example, the best-qualified enlisted SEAL operators were recruited to conduct "mock" attacks on real targets to display the effectiveness of the Quantum Leap efforts. The small working group reported directly to the Commander, NSWG-1 and did not report to another individual within the NSWG-1 organization. The small working group enjoyed a direct line of communication with the NSWG-1 Commander. The

Commander would intervene when the group required additional help to solve major problems or issues. He intervened to help the small working group find adequate office space at NSWG-1. The group's leader had unlimited access to the Commander, who was personally committed to the success of the project. The Commander provided the vision and he clearly defined the tasks and goals for the group. The Commander understood how important the project was to the future relevancy and success of the NSW community. He wanted the Quantum Leap small working group to produce innovative concepts, test and evaluate the concepts with practical exercises and report the successes, failures and recommendations. With this information from the group, the Commander moved the project forward. The Commander provided the vision and gave the group leader the responsibility with the authority to make changes and complete the objectives of the project. (Clarke, NSWG-1, 29 Jun 2000)

## **2. Resources and Funding**

The small working group was given the resources and funding it required to complete its assigned tasks. The group was provided \$150,000.00 of discretionary funds for the first year of operation. Although \$150,000 may not

seem like a large amount of money, the people I interviewed agreed it was enough to get the program off and running. A majority of the money was spent on purchasing new equipment for the project. Additional computer terminals, a complex tracking system, and tracking boxes were purchased.

(Clarke, NSWG-1, 29 Jun 2000) The group was given the time required to complete its tasks without pressure to speed up the schedule. It must be mentioned that during a change in leadership, the Quantum Leap Project temporarily lost funding, resources and direction under a new Commander. The project almost died. The new Commander had to be convinced of the worthiness of the project before committing additional funding and resources to it. The group leader convinced the new Commander of the value and importance of the project and he became a great supporter and patron of the project for the rest of his time in command. (McRaven, NSWG-1, 30 Jun 2000)

### **3. Autonomy**

The Quantum Leap small working group was given autonomy from the larger organization to meet its objectives. The Commander stated, "If you need help, let me know." (Clarke, NSWG-1, 29 Jun 2000) Otherwise, the Commander provided the endstate and instructed the group to

get there. The Commander informed the group that they were free from the normal rules of NSWG-1 and allowed to use all available NSWG-1 staff to achieve the desired endstate. The Chief Staff Officer, as group leader, understood how to keep the project moving and ensured that the group was never micromanaged. The group was free to task organize as it saw fit without outside interference from the rest of the organization. The group set its own agenda and plan of action and milestones free from organizational pressure. The organization was actively involved and helped the group when they needed outside assistance. NSWG-1 assisted in getting additional SEAL operators involved with the Quantum Leap project. The leadership cared about the progress that the small working group was making and ordered the rest of the organization to provide help whenever requested. The group purchased equipment and supplies whenever it was required. During the initial phase of the project, the group was able to quickly purchase equipment, without the usual red tape, in order to get the project moving.

(Clarke, NSWG-1, 29 June 2000)

#### **4. Ownership**

In order for the innovations produced by Quantum Leap's small working group to be implemented, the NSW

leadership and community had to take ownership of the project. In order for the NSW leadership and community to take ownership of an innovation they must understand it, identify its value, and assist during the implementation process. The Commander, NSWG-1, who first started the project, had ownership of the project as it began under his guidance and direction. An indication that the NSW leadership had taken ownership of the Quantum Leap project was that exercises were conducted with the primary task of validating the Quantum Leap innovation.

An extremely difficult problem for military organizations trying to produce innovation is keeping the project alive and well during the frequent changes in leadership. The Quantum Leap project nearly died when the next Commander was not involved with the project and did not understand it or recognize its value for several months. Had the group leader failed to convince the new commander of the merit of the project, it might have ceased to exist and would have failed to produce innovation. The new Commander eventually understood the Quantum Leap Project, recognized its value, and assisted in the implementation. He took ownership of the project. Once the Commander took ownership of the project, it was instantly revitalized by a new influx of resources and



funding. The Commander took ownership and placed it higher on his list of priorities. The NSW leadership took ownership of the project and provided talented and highly qualified personnel to take an active part in the Quantum Leap program. This ensured that the leadership had ownership of the project and that the project had qualified personnel to successfully complete its tasks. (McRaven, NSWG-1, 30 June 2000)

The Commander, NSWG-1, during a discussion about the importance of ownership needed from the NSW leadership for an innovation to take hold, stated, "The first thing we did was get the Commanding Officers and Command Master Chiefs onboard. Then we briefed the staff here [NSWG-1] and then I briefed the Admiral [CNSWC]." (McRaven, NSWG-1, June 30, 2000) All of the key personnel briefed needed to have ownership of the project for it to be implemented and utilized. Having the support of the admiral provides ownership at the highest level that will positively influence the entire NSW community and help stimulate successful innovation.

#### **5. License to Fail**

The small working group was given a license to fail by the Commander of NSWG-1. The Commander understood that in order to produce innovation, the road would be full of

stumbling, mistakes and failures. The guidance provided by the leadership was to learn by making mistakes. He believed that the small working group should make educated decisions to push innovation forward. It would be impossible to push innovation forward without making mistakes along the way. (Clarke, NSWG-1, 29 June 2000)

During interviews with two members of the small working group, they said that, no member of the group was in fear of losing a promotion if the group failed to produce an innovation. The group could fail without fear of retribution from the leadership or the rest of the organization. The Commander made it perfectly clear to the group leader that failure and mistakes would happen and that the group should learn from them. It was also made clear to the NSWG-1 staff to give additional assistance to the project when it hit a barrier or roadblock. (McRaven, NSWG-1, 30 June 2000)

### **C. SUMMARY**

Project Quantum Leap successfully produced innovation by improving the operational capabilities of SEAL platoons to conduct NSW missions. The Indirect Warfare innovation exposes SEALs to less risk while improving the chances of

successfully completing the mission. The five key variables were all present while the Quantum Leap small working group worked to produce innovation at NSWG-1. When the ownership variable was missing during the first several months after a leadership change, the project languished, lost direction and almost ended. When the ownership variable was not present, it triggered negative reactions in the support and guidance of the leadership and the resources/funding variables. This indicates how important it is for the Commander to take ownership of the project. If he does not take ownership, the project is in serious jeopardy. It is also important for the NSW community to have some ownership to facilitate support through leadership transitions. This case study suggests that when one variable disappears, it can have a cascading effect on other variables and almost stop the project in its tracks.

Quantum Leap is a success in itself by surviving three changes of command at NSWG-1 and producing innovation. Many small working group projects die in the military when the leadership changes and the following Commander does not take ownership of the project. The new Commander may not identify the value of the project and choose not to support it. When this occurs, it is only a

matter of time before the project will fail. It is crucial that the group leader has a strong character, be influential and respected by the NSW community, if the project is to survive the constant change of commands in the military. The group leader must immediately show the value of his project to the new Commander so he will take ownership, lend support, guidance and resources to the project. The Quantum Leap case study shows that the critical point of the project occurred immediately following a change of command.

Another related event that proves that Quantum Leap was successful at producing innovations is that new, innovative projects such as Project 21 and the Mission Support Center (MSC) have evolved producing new innovations from the original Quantum Leap Project. The innovations produced and lessons learned from Quantum Leap have been incorporated into the concept, design and functions of the MSC. The MSC is a building with all the necessary equipment and networking applications to support overseas operations from its location at NSWG-1 in San Diego. The mission statement for the MSC is, "Collect, organize and disseminate mission essential information into a form specifically tailored to the Mission Commander's need in order to focus a larger percentage of the operator's

limited time on the execution phase of planning, gear preparation and rehearsals, thereby enhancing the probability of mission success." (McRaven, NSWG-1, 2000)

The MSC project cornerstones - distributive planning, network analysis, fusion, situational awareness, force reaction and enablers - are all concepts originally developed by Quantum Leap. The MSC is now completed and has successfully conducted its first overseas exercise.

	Support & Guidance of Leadership	Resources	Autonomy	Ownership			License to Fail
				LDS	NSW	SWG	
Quantum Leap	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>

Table 1. Quantum Leap Variables

#### IV. MKV SOC CASE STUDY

##### A. BACKGROUND

During the Persian Gulf War in 1990-1991, NSW used patrol craft designed in the 1960s that were well beyond their usable service life. The craft had documented design flaws that jeopardized personnel safety and mission effectiveness. The Gulf War proved that NSW needed a new and improved medium range craft to meet its current and future mission requirements. A small working group was formed at USSOCOM to develop a new patrol craft to replace the aging Patrol-Lights, Sea foxes and Patrol Boat-Riverines in the NSW inventory. The goal of the small working group was to provide the best possible craft to the NSW community, meeting its requirements in the shortest time, and staying within budget limitations. The Mark Five Special Operations Craft (MKV SOC) project would soon produce a new, innovative patrol craft whose design and performance would be second to none. The small working group developed the MKV concept into a unique design, oversaw system integrations and construction, and evaluated the product during operational testing.

The primary mission of the MKV SOC was to provide medium range insertion and extraction support for Special

Operations Forces (SOF) personnel in a low to medium threat coastal environment. The secondary mission of the MKV SOC was coastal patrol and interdiction. The operating system of a MKV SOC Detachment was designed as a C-5 deployable, road transportable combatant craft comprised of two craft, with two transporters and tractor-trailers. A deployable support package that was made up of containerized support components and vehicles would accompany each detachment. Each detachment would have a Maintenance Support Team (MST) that would consist of two officers and sixteen enlisted whose job was to keep the MKV detachment operational and prepared to conduct NSW missions.

Initially, the acquisition of the MKV SOC was going to be managed by the Commander, Naval Sea System Command (NAVSEA). After determining that it would take NAVSEA seven years until the first craft would be operational, USSOCOM petitioned and won the right to execute the program in-house. A SEAL Captain was chosen to be the first program manager of the MKV SOC project. He was also the group leader for the MKV SOC small working group. The Group Leader reported to the USSOCOM Program Executive Officer for Maritime and Rotary Wing Platforms (PEO M&R). The PEO M&R reported to the Special Operations Acquisition Executive (SOAE), a civilian SES who had milestone decision

authority for the MKV SOC program. This meant, the SOAE's decisions were final and only the Commander-in-Chief, Special Operations Command (CINCSOC) had the authority to overturn the SOAE's decisions. The group leader had a deputy and several support staff in the small working group such as a financial adviser and a contracting officer. The MKV SOC small working group, which had overall responsibility for the project, had less than ten full time members. He had various technical support teams made up primarily of contractors who were in charge of specific functions on the MKV SOC project such as weapons and engineering.. He also had Special Boat combat crewmen from both Special Boat Unit Twelve (SBU-12) located in San Diego, CA and SBU-20 located in Little Creek, VA who would make recommendations on improving the MKV SOC during the developmental and operational testing phases.

The MKV SOC project produced a craft that met or exceeded the operational requirements of a medium range patrol craft. The small working group also produced significant innovations such as compressing the acquisition timeline.

"The truly impressive result of this streamlining strategy was that, in the case of the MKV SOC acquisition, from February 1992, the date the program was officially chartered, to delivery of the first two production MKV SOC



systems took only 40 months, almost four years ahead of the initial program execution estimates." (USCINCSOC, 1998, p. 3)

## **B. VARIABLES**

### **1. Support and Guidance of the Leadership**

The MKV SOC small working group enjoyed the support and guidance of the leadership. As USSOCOM took the project from NAVSEA and it was USSOCOM's first in-house acquisition of a major platform, CINCSOC had to ensure that the project was a success. He understood the importance and future implications that the project would have for the USSOCOM acquisition process. The MKV SOC group leader reported directly to the PEO M&R. The PEO M&R kept the unnecessary bureaucratic activities away from the MKV SOC small working group and took care of the daily administrative duties. (Freeman, USSOCOM, 26 Oct 2000)

The PEO M&R had great confidence in the group leader to keep the MKV SOC project moving in the right direction. The group leader benefited from a short, two-layer chain of command. The Acquisition Executive was extremely helpful and supportive of the project and was empowered with the ultimate authority concerning the MKV SOC project. It was extremely rare that the group leader would ever need to go above the Acquisition Executive for help on the project.

The group leader not only had support and guidance from USSOCOM, but he also enjoyed support and guidance from COMNAVSPECWARCOM. "The group leader traveled to the West Coast [to brief the SEAL admiral] every two months."

(Freeman, USSOCOM, 26 Oct 2000) The group leader kept the SEAL admiral appraised of the progress of the MKV SOC program and was provided help from NAVSPECWARCOM whenever he needed it.

The group leader volunteered and was personally recruited by USSOCOM and the NSW leadership to head the MKV SOC project. The group leader was a highly respected member of the NSW community and possessed a great deal of knowledge and expertise on NSW small boat operations. USSOCOM and NAVSPECWARCOM leadership provided the group leader with a clearly defined goal of developing a patrol craft, which met the NSW requirements in the shortest time, and within budget limitations. (USSOCOM, MKVSOC Standard Information Document, p. 2)

## **2. Resources and Funding**

The MKV SOC project was staffed with the right personnel, who possessed the required skills to meet the goal of the project. In addition to the key personnel of the small working group, the group enjoyed support from

eighteen contractors as well as support, from the technical support team, operator support from the Fleet Introduction Team, USSOCOM staff directorate support, and other agencies and commands. Although the actual MKV SOC working group was small, it had access to any expertise it required to complete the project successfully.

The group was given the time needed and was allowed to focus on completing its tasks. The group used an innovative streamlined acquisition process to shorten the length of time needed to complete the project. All developmental and production testing was completed ahead of schedule and all production milestones were on time or ahead of schedule.

The group was given the appropriate amount of funding to complete its tasks. Funding was transferred to the companies, who were competing for the MKV SOC contract, on time and without problems. (Freeman, USSOCOM, 26 OCT 2000) The funding for the program was made available from Research, Development, Test and Evaluation (RDT&E) funds for the first two years of the project. The following years the funds came directly from the command's Program Objectives Memorandum (POM) and were funded directly from the USSOCOM budget. (The POM is the routine process by which a project is funded in the Department of Defense.)

The small working group was given the funding it needed, but the group leader challenged the status quo and found ways to save money. For example, the original cost estimate for the developmental testing of the MKV SOC was five million dollars. The group leader challenged that dollar figure, conducted the tests in Key West, Florida and Eglin AFB, Florida and it cost only five hundred thousand dollars to test the craft, saving \$4.5 million.

### 3. Autonomy

The MKV SOC small working group was given autonomy from USSOCOM to focus completely on its goal of developing a medium range patrol craft. The group leader was allowed to separate the group from the daily routine at USSOCOM. The group leader moved the group into an old barracks; away from the USSOCOM headquarters to better help the group focus on its mission. The group enjoyed a workspace of its own, and worked virtually uninterrupted. The group leader only reported to his boss when he needed help with problems. The group leader was never micromanaged by USSOCOM. The group was allowed to change the acquisition cycle and streamline the process. The group leader was also able to receive approval and funding for a complete logistics package that included trucks, trailers and spare

parts, so the first operational MKV SOC detachment and all future detachments would have the complete package required for an operational deployment. The group leader was given the autonomy by the Acquisition Executive to make this happen. (Freeman, USSOCOM, 26 October 2000)

#### **4. Ownership**

The NSW leadership understood the MKV SOC project, recognized its value and assisted its implementation. They took ownership of the MKV SOC project from the beginning. It was recognized throughout the NSW community that a medium range patrol craft was badly needed. The group leader worked very hard to keep NAVSPECWARCOM informed so they felt as if they were part of the project. The Fleet Introduction Team (FIT), which consisted of SBU operators whose job it was to ensure the craft had a smooth transition from SOCOM to the Special Boat Units, took ownership of the project immediately. The SBU operators looked at the MKV SOC as their craft and made recommendations on how to improve craft performance and capabilities. The FIT team concept allowed the first MKV SOC system packages to be delivered with trained crews, complete deployment and spare parts packages and in a fully operational ready status.

Members of the NSW community were integrated into specification reviews, design reviews, construction monitoring, developmental and operational testing, progress reviews, integrated logistics support development, configuration control and system delivery process and planning. The small working group made it a point to deal with NSW operators who could positively influence the final product and had a vested interest in the success of the program. Including the operators in this way, who were the end users of the craft, from the start of the project ensured that the NSW community took ownership of the project. (Freeman, USSOCOM, 26 OCTOBER 2000) This would help the MKV SOC during the implementation process and ensured the entire NSW community accepted them. A final indicator that the NSW leadership took ownership of the MKV SOC project was that training manual were written, exercises conducted and doctrine established to validate the MKV SOC program.

##### **5. License to Fail**

The MKV SOC small working group had a license to fail from USSOCOM. During a telephone conversation with a MKV SOC small working group member, he said that no member of the group was in fear of losing a promotion if the group

failed to produce the MKV SOC platform that would meet the operational requirements. No failures or setbacks caused the group to be in jeopardy of being dissolved. The group could fail without fear of retaliation from the USSOCOM leadership or the rest of the organization. The group was very confident and understood it had the potential to produce a great, innovative system that would benefit the NSW community and enhance its operational capabilities. Failure was not on the minds of the group members. The most critical event of the MKV SOC project was loading the MKV SOC on a C-5 and then air deploying the system.

(Freeman, 26 OCTOBER 2000) In order for the project to be successful and meet the Operational Requirements Document of COMNAVSPECWARCOM, the MKV SOC had to fit inside a C-5 aircraft. Had this failed, this would have been a setback for the program. The group was confident and they had no fear of failure or its repercussions.

### C. SUMMARY

The MKV SOC project was a success by every measure. All five key variables were present: support and guidance of the leadership, resources and funding, autonomy, ownership, and the license to fail, while the small working group labored to develop a unique, innovative insertion and

extraction platform. The project received a very high level of priority from the top leadership at USSOCOM and NAVSPECWARCOM. Due to the project being taken from NAVSEA's control, and being the first in-house acquisition project at USSOCOM the success of the project was a major priority of the leadership at USSOCOM. They realized that the success of the MKV project would have future ramifications on the prestige of USSOCOM and its acquisition process. USSOCOM understood that NSW needed a medium range patrol craft. Lack of one was a serious shortfall that adversely affected operational readiness. USSOCOM took the project from NAVSEA because it believed that it could produce a patrol craft in less than the seven years required by NAVSEA. NSW understood it badly needed a new patrol craft to insert and extract SEALs from a target on a craft that provided a reliable, safe, operator friendly and relatively comfortable platform.

NSW operators were involved with the project from the beginning of the acquisition process. The Fleet Introduction Team was made up of SBU operators. They made continuous recommendations for improvements and identified problems during the entire project. The SBU operators involved in the MKV SOC project returned to the Special Boat Units excited about the capabilities of the MKV SOC's.



Many of the most qualified SBU operators wanted to be involved with the MKV SOC project. The license to fail variable was the weakest of the five variables. After interviewing a MKV SOC small working group member, I believe it was present, but it was never positively tested. The group was so confident during the project that failure never entered their minds. There was not an event that was a critical failure that seriously threatened the project.

The MKV SOC small working group not only produced an innovative new craft for the NSW inventory, but it produced innovative processes such as acquisition streamlining, and end user participation. The MKV SOC project was a successful innovation in all aspects.

	Support & Guidance of Leadership	Resources	Autonomy	Ownership			License to Fail
				LDS	NSW	SWG	
Quantum Leap	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
MK V SOC	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>

Table 2. Quantum Leap/MKV SOC Variables

## V. VISION 2000 CASE STUDY

### A. BACKGROUND

During the early 1990s, the East Coast SEAL Teams encountered difficulties finding qualified SEAL 0-4s to accept command of a Naval Special Warfare (NSW) Task Unit (one SEAL platoon, one Special Boat detachment) attached to the Mediterranean Amphibious Ready Group (MARG). Qualified SEAL officers steered clear of the MARG Task Unit Commander assignment, as there was little career incentive in accepting a difficult job and deploying for six months. The Task Unit Commander directly supported the Commander, Amphibious Task Force, a Navy Captain who commanded the three ship MARG. Also, on board was a Marine Expeditionary Unit that consisted of approximately two thousand marines commanded by the Commander, Landing Force, who was a Marine Colonel.

Deployments with the MARG were perceived as extremely frustrating and often boring. It was extremely difficult to train while onboard Navy ships and this had an adverse effect on SEAL operational skills. Arguably, the NSW forces assigned to the MARG were the best-trained and equipped forces present, but the NSW Task Unit was losing most battles in the political arena with the fleet navy and the marines. NSW operators were excluded from operations

where they felt their involvement would greatly enhance mission success. Lack of training and being excluded from real world operations was extremely frustrating to the SEALs attached to the MARG.

Another problem that the East Coast SEAL Teams faced was a very high percentage of time each person stationed at a SEAL Team was deployed away from his family (i.e., perstempo). The perstempo was 55%. This meant that the average SEAL operator was deployed approximately 200 days out of every year. This extremely high perstempo adversely affected professional development, schooling, and morale. There was no time in the SEAL operator's schedule for advanced training and schooling.

Other problems noted were the lack of NSW officers forward deployed, and the lack of command unity while forward deployed. The full potential of NSW was not realized while on deployment. The deployed NSW assets could not conduct interoperability and sustainment training with other deployed NSW assets. The deployed NSW forces were "stove-piped" organizations, which meant they could only utilize their limited on-hand or organic assets instead of utilizing the full network of NSW assets in theater to enhance flexibility. NSW units supported the Commander, Special Operations Command, Europe (COMSOCEUR)

and the Commander, Sixth Fleet (COMSIXTHFLT). Two SEAL platoons and two Rigid Hull Inflatable Boat (RIB) detachments directly supported COMSOCEUR. NSW had three separate NSW Task Units supporting Sixth Fleet which were deployed on the Aircraft Carrier, MARG and a submarine. Under this force structure, individual NSW units remained stove-piped, which meant the units could not combine assets and operate together to enhance mission capabilities and flexibility. Another problem identified by the leadership at NSWG-2 was the limited shore duty billets for enlisted NSW operators. (Toennies, NSWG-2, p. 2)

These problems led the Commander, Naval Special Warfare Group TWO (NSWG-2), located in Little Creek, VA to form an Executive Steering Committee in the fall of 1994. The commander appointed himself as the group leader of the Executive Steering Committee. This small working group consisted of a SEAL commander, Chief Staff Officer of NSWG-2 and the commanding officers of: the three SEAL Teams, the SEAL Delivery Vehicle Team, and the three overseas NSW units. The small working group consisted of nine members formed to develop a strategic plan for NSWG-2.

The Executive Steering Committee developed a bold, innovative plan for NSW named "Vision 2000". The primary goal of Vision 2000 was to, "Provide the most capable

warfighting organization possible to each combatant commander." (Toennies, NSWG-2, p. 1) Vision 2000's goal was to provide joint and fleet commanders from each region of the world the most flexible force package of NSW assets. In order to achieve the primary goal of Vision 2000, supporting goals and principles were developed. The Executive Steering Committee wanted to improve the following areas: 1) unity of command at SEAL Teams and overseas NSW units; 2) SEAL commanders' focus on warfighting; 3) optimization of force structure; 4) efficiency of training; 5) combat service support and maintenance; and 6) integration of NSW forces. (Toennies, NSWG-2, p. 1)

The Executive Steering Committee developed the Vision 2000 concept to help NSW improve the structure of its organization to meet the challenges of the future. The cornerstone of the Vision 2000 concept created a Naval Special Warfare Task Group (NSWTG) with a SEAL 0-6 in charge to provide a single SEAL officer who would be in charge of all NSW forces in Europe. The NSWTG Commander would be an operational commander whose focus was on warfighting and he provided both COMSOCEUR and COMSIXTHFLT, a single NSW commander to call when NSW forces were required for real world operations. The NSWTG Commander

would have the authority to pull together NSW forces from around the European Theater to enhance the combat effectiveness of the NSW forces.

This authority to command and control all NSW forces in Europe would solve the problem of the deployed NSW forces being inflexible, stove-piped organizations. Having an O-6 forward would increase the flexibility of the NSW force package and allow the best mix of NSW forces to deploy in support of contingencies and real world operations. The NSWTC Commander, as a O-6 operational commander, would be invited to participate during high level contingency planning conducted by COMSOCEUR or COMSIXTHFLT.

Another concept of Vision 2000 was to reorganize NSWG-2. Streamlining the current force structure and creating an additional SEAL Team was proposed in order to support the Vision 2000 plan of command deployments where each command would deploy forward as a NSW Task Unit. Having an additional SEAL Team would solve perstempo problems, the unity of command issues, and increase time for professional development and specialty schools. A new SEAL training command would be created to streamline how the SEAL Teams trained. At the same time, this command would provide more shore duty billets for enlisted SEAL operators.

Two operational deployment cycles were conducted with a SEAL 0-6 as the NSWTG Commander. The deployments were highly successful. The NSWTG planned and executed special operations in support of COMSIXTHFLT, conducted interoperability with COMSOCEUR, and exercised operational control of patrol coastals during the deployment. The NSWTG acted as the executive agent for NSW training and readiness and was the COMSIXTHFLT agent for NSW/SOF related issues. COMSIXTHFLT approved and endorsed the NSWTG in every aspect and liked the flexibility and enhanced operational capabilities provided by the NSWTG.

The Vision 2000 innovation would have improved the operational capabilities of SEAL platoons and Special Boat detachments to conduct successful NSW missions. The Vision 2000 innovation failed and was not implemented by NSW.

## **B. VARIABLES**

### **1. Support and Guidance of the Leadership**

The Executive Steering Committee had the support and guidance of the leadership. The committee was a unique small working group due to the fact that the Commander, NSWG-2, was also the committee leader. The commander personally selected the members who would make up the small

working group. The committee leader provided the vision required for strategic planning. The immediate superior of the committee leader (Commander, NSWG-2) was the Commander Naval Special Warfare Command (COMNAVSPECWARCOM), who was the senior SEAL officer. Due to his position and rank, the committee leader had a direct line of communication with his superior. The SEAL admiral was concerned with the costs of Vision 2000. He set the boundaries for the program. Vision 2000 could not require more funding or personnel, must be approved by the theater commanders, preserve the SEAL Team name and could be applied to both coasts. Both COMSOCEUR and COMSIXTHFLT approved the NSWTG deployment, as did COMNAVSPECWARCOM. (Toennies, NSWG-2, 03 November 2000) The cornerstone of the Vision 2000 concept of having a SEAL 0-6 in command of the NSWTG in Europe was approved by all the required commanders and moved forward.

## **2. Resources and Funding**

The Executive Steering Committee had access to resources and funding required to meet its goals. Even though Vision 2000 would not receive additional funding, the Commander, NSWG-2 had the authority to use the NSWG-2 budget as he saw fit. He shifted funds to the Vision 2000 project ensuring it would not run out of resources. The



committee was staffed with the personnel who had the required skills to complete the assigned tasks. The committee leader made it clear that the Vision 2000 project was a priority at NSWG-2 and that any member of the committee that required assistance would receive it immediately.

The committee was broken down into chairmen for particular functional areas such as facilities and training requirements. A member of the committee was allowed special access to personnel at NSWG-2 that possessed the required knowledge and expertise. For example, the facilities chairman was given special access, without being burdened by normal protocol, to the NSWG-2 Civil Engineer for detailed questions such as, "How much square footage is required for an office space for two people?" Various members of the NSWG-2 staff assisted in answering detailed questions, which helped the committee members meet their goals.

The committee was also given the time required to complete its tasks. The goal chairmen met monthly, stayed current on relevant issues so the project would not stall and reported back to the entire committee. The committee members were extremely busy commanding officers, and still found time to commit to the Vision 2000 project. Due to

the fact that the committee members were very busy, the time schedule was realistic and allowed members the time to be commanding officers as well as productive committee members. (Toennies, NSWG-2, 03 Nov 2000) During an interview with the group leader, he said funding was made available when committee members required it to meet their objectives. If a committee member needed to travel to help the project move forward, funding was always provided.

### **3. Autonomy**

The committee was given autonomy from the rest of the NSWG-2 organization. The committee members were highly respected commanding officers so they had autonomy that lower ranking, less experienced committee members would not have had. The committee leader was the Commander, NSWG-2. By having the NSWG-2 Commander as the committee leader, Vision 2000 enjoyed autonomy that many small working groups would never have. (Toennies, NSWG-2, 03 November 2000)

The committee leader provided vision to the group and allowed the goal chairmen the latitude and autonomy to work on their goals without interference from him or the rest of the NSWG-2 organization. During an interview with the group leader, he said whenever a chairman had a problem,

they could go straight to the committee leader for resolution or assistance and they were not required to get approval from lower ranking officers at NSWG-2. By having the commander as the committee leader, it kept the chain of command flat and kept the rest of the organization from interfering with the committee's progress.

The small working group's leader had final authority on all decisions during the Vision 2000 project. It proved to be very beneficial to the committee's progress. The chairmen would meet monthly and the committee as a whole would meet once per quarter. Only meeting once per quarter to review progress indicates that the committee enjoyed a great deal of autonomy in completing its tasks. Chairmen were free to meet with whomever they needed to exchange ideas, brainstorm or share recommendations. (Toennies, NSWG-2, 03 November 2000)

#### **4. Ownership**

Initially, key leaders in the NSW community took ownership of the Vision 2000 project and helped during the initial implementation process. Two concept deployments were made and proved that the Vision 2000 concept was sound providing the most capable NSW organization possible to each combatant commander. The deployments proved that

having a SEAL 0-6 in command at the NSWTG in the European Theater worked. It was so successful that the Commander, Sixth Fleet demanded that the deployments continue.

(Toennies, NSWG-2, 03 November 2000)

Just as the Vision 2000 concept was validated, the entire leadership at NSWG-2 and the members of the Executive Steering Committee changed in the summer of 1996. Also, there was a change of command at NAVSPECWARCOM. These changes in leadership brought in new leaders who did not understand the Vision 2000 project, who were not involved, and did not take ownership of the project. The new Commander of NAVSPECWARCOM was briefed on the project and was a supporter of the project, but it failed to become a major priority or focus. (Toennies, NSWG-2, 03 November 2000)

There was a change of command at NSWG-2 and the new commander had heard of the project and did not approve of it. The new commander was briefed on the Vision 2000 project. The new commander asked, "How are we going to continue to do this?" (Toennies, NSWG-2, 03 Nov 2000) He was concerned that NSWG-2 was wasting valuable time and scarce resources on the Vision 2000 project. The new leadership was not involved in the project, did not

understand it, never took ownership of it and the project languished, lost steam and died.

#### **5. License to Fail**

The Executive Steering Committee was given the license to fail by the Commander, NSWG-2. During the interview with the group leader of Vision 2000, he said that, no member of the group risked not being promoted if the committee failed to produce an innovation. The members were not in fear of receiving a bad fitness report if the committee failed in its efforts. The committee was never in jeopardy of being dissolved due to a failure. The committee was given the latitude to fail without fear of retribution from the rest of the organization. By having the Commander, NSWG-2 as the committee leader, the committee enjoyed great latitude to explore and think innovatively to benefit the NSW community. The committee leader possessed the final authority and did not have to explain failures to anyone else in the community.

(Toennies, NSWG-2, 03 November 2000)

#### **C. SUMMARY**

The Vision 2000 case is a study of when NSW failed to innovate. Initially, the leadership took ownership of the

Vision 2000 project. The project stalled and eventually died due to new leadership taking command and not taking ownership of the project. The new leaders did not understand the project, were not involved with it and did not buy into the project. Due to changes of command that removed all the key leaders that had ownership of the project and replaced them with leaders who did not take ownership of the project, the project failed. Vision 2000 did not fail because of faulty of misguided ideas and concepts; it failed because the ownership variable disappeared during leadership changes.

	Support & Guidance of Leadership	Resources	Autonomy	Ownership			License to Fail
				LDS	NSW	SWG	
Quantum Leap	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
MK V SOC	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
Vision 2000	<b>X</b>	<b>X</b>	<b>X</b>			<b>X</b>	<b>X</b>

Table 3. Quantum Leap/MK V SOC/Vision 2000 Variables

Note: X's not bolded in table indicates that the author believes the variable was present, but difficult to prove.

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## VI. CONCLUSION

### A. FINDINGS

This thesis found that the five key variables identified by McCaskey and NSW leadership were present when small working groups succeeded in stimulating innovation within a larger organization. The case studies confirm the importance of having the support and guidance of the leadership, access to resources and funding, and autonomy, if the small working group is to produce innovation. The small working group must also have the license to fail in order to push the envelope and think innovatively without fear of failure.

The license to fail variable was the most difficult to prove during the case studies. Often the group believed that they possessed the license to fail, but it did not test the leadership of the organization. In order to positively test for its presence, the case studies needed to provide major failures or setbacks. This did not happen during the three Naval Special Warfare (NSW) case studies. The Vision 2000 case study failed to produce an innovation, but the project did not have any major failures or setbacks until it was ended.



The three case studies suggest that the ownership variable is the most important variable and must be present for an innovative project or concept to be implemented. The small working groups all took ownership of their innovative projects from the beginning. A new leader is not guaranteed to take ownership of an innovative project initiated prior to his arrival. If the NSW community does not take ownership of the project, implementation will become a major problem. If the ownership variable disappears, then it is only a matter of time until other variables disappear and the innovative project comes to an abrupt end.

The case studies display that implementing an innovation is the most difficult phase during the innovation process. Innovative projects may cover a four to five year period from beginning to end; some projects continue for ten years or more. The three NSW case studies covered approximately 5 years or slightly longer.

A critical point was identified during the evaluation of the data collected on the case studies. This critical point was the period of time immediately following a change of command or change in leadership. In the Quantum Leap case study this critical point surfaced when a new commander took over Naval Special Warfare Group ONE (NSWG-

1), he did not understand the project, was not involved with it and did not take ownership of the project and it almost died. In the Vision 2000 case study following a change of command at NSWG-2 and most members of the Executive Steering Committee, the new leaders did not take ownership of the project and the project died.

When new commanders fail to take ownership of an innovative project, other key variables such as support and guidance of the leadership and access to resources and funding will eventually disappear. When these variables disappear, the project will languish and eventually end. Approximately every two years in the military, a command's leadership will be replaced at a change of command ceremony. This two-year cycle of command leadership will not change. The changes in leadership within the military are a constant. With that in mind, to keep innovation moving leaders must address the critical point following a change of command and identify procedures to keep an innovation alive and well following a change in leadership.

## B. RECOMMENDATIONS

The leadership of a command should recognize the value of all five variables when a small working group is trying to produce an innovation. It is the responsibility of the leadership to ensure that the variables are present within the parent organization while the small working group is attempting to innovate.

The commander of the parent organization and the small working group leader must work together to ensure that the new commander will take ownership of the innovative project. The commander and/or the group leader should brief the new commander once he has been identified to take command prior to his actual arrival. In order for the new commander to take ownership of the project, he must thoroughly understand the project, its purpose, and the value of the project. The new commander should understand the beneficial effects the project will have on the NSW community. It would be beneficial to the project to involve the new commander actively on the project. He should receive updates on progress, milestones achieved, successes and failures and should be encouraged to make recommendations concerning the project. The commander and the group leader should push to get the new commander to

approve, support and commit to the success of the project. The group leader needs to be confident and continue to sell the new commander on the merits of the project after he takes command.

It is the responsibility of the commander and group leader to ensure that the entire NSW community takes ownership of an innovative project. They should brief individual NSW commands as often as possible. It is much easier for the NSW community to take ownership of a project when a majority of the community has been briefed on the project and they have had a forum to ask questions and make recommendations. With this broader support, the challenge of leadership transition may be reduced. The commander and group leader need to get as many NSW personnel involved with and actively supporting the project as feasible. They need to have "buy-in" from the 0-4/0-5 level. It is necessary to brief all stakeholders who will be affected by the project. This will limit misinformation and will limit the affect that detractors of the project will have on the community. If the commander and group leader accomplish most of the above recommendations, it will not guarantee that an innovation will be implemented and successful, but it will greatly enhance the chances that the innovation will survive and be successful in the end.

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## LIST OF REFERENCES

Interview between F. Clarke, GS-13, Naval Special Warfare Group ONE, Coronado, CA, and the author, 29 June 2000.

Telephone conversation between Dale Freeman, contractor, United States Special Operations Command and the author, 26 October 2000.

Glenn, T., "The Formula for Success in TQM," *The Bureaucrat*, pp. 17-20, Spring 1991.

Lipman-Blumen, J. and Leavitt, H., *Hot Groups*, New York: Oxford University Press, 1999.

McCaskey, M., *Framework for Analyzing Work Groups*, Harvard Business School, 480-009, 1979.

Interview between W. McRaven, CAPT, USN, Naval Special Warfare Group ONE, Coronado, CA, and the author, 30 June 2000.

Naval Special Warfare Group ONE presentation, *Project 21: Naval Special Warfare in the 21<sup>st</sup> Century*, McRaven, W., Coronado, CA, pp. 8, 12, 33.

Naval Special Warfare Group TWO presentation, *Naval Special Warfare Task Group Sixth Fleet: Post Deployment Brief*, Toennies, P., Little Creek, VA, pp. 2-3.

Naval Special Warfare Group TWO presentation,

*Reorganization Concept: NSW 2000*, Toennies, P., Little Creek, VA, pp. 3-4.

Rosen, S., *Winning the Next War: Innovation and the Modern Military*, Ithaca, NY: Cornell University Press, 1991.

Schoomaker, P., *Special Operations Forces: The Way Ahead*, Commander-in-Chief, United States Special Operations Command Pamphlet, 1999.

Interview between P. Toennies, CAPT(ret.), USN, Naval Special Group TWO, San Diego, CA, and the author, 03 Nov 2000.

USCINSOC, *USCINCSOC 1998 Quality Team Award*, pp. 1-6, 1998.

United States Special Operations Command, *MKV SOC Program Standardized Information Document*, pp. 1-2.

Wilson, J., *Bureaucracy*, New York: Basic Books, Inc., 1989.

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